E&P Opportunities Offshore Uruguay

August 27, 2024

Bruno Conti

Energy Transition - ANCAP

ANCAP

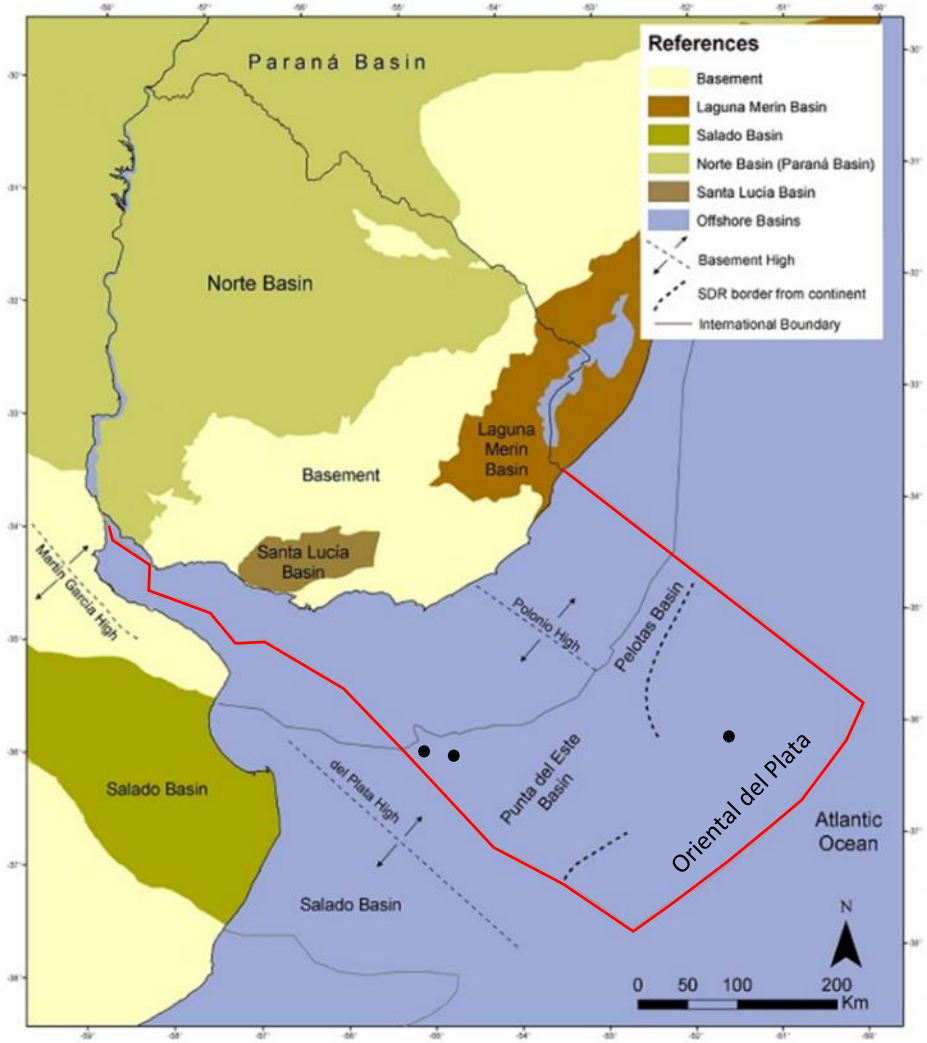
Content

- Offshore basins geology
- Database
- Prospectivity
- Analogies with Namibia
- Uruguay Round
- Final remarks

Content

- Offshore basins geology
- Database
- Prospectivity
- Analogies with Namibia
- Uruguay Round
- Final remarks

Geology of the area



Basins offshore Uruguay:

- Punta del Este to the West
- Pelotas Basin to the East
- Oriental del Plata

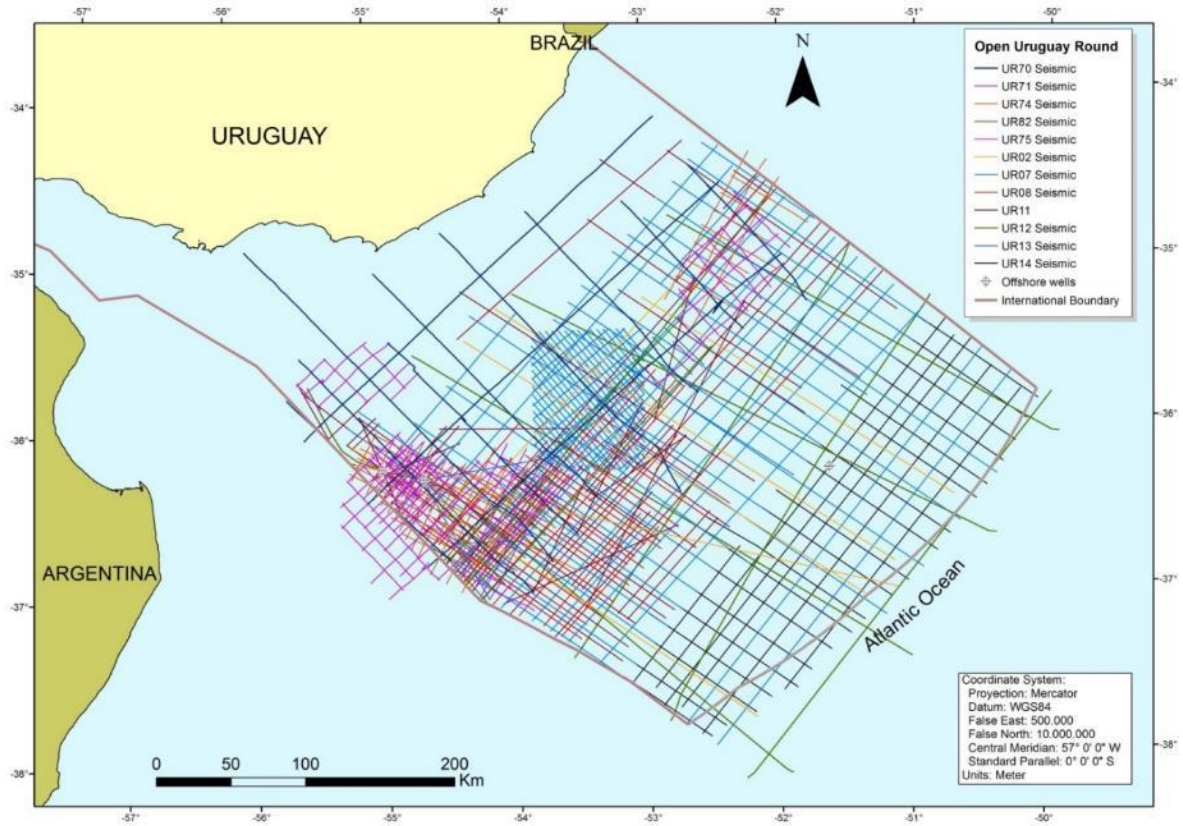
Only 3 wells drilled in an area of 125.000 km^2.

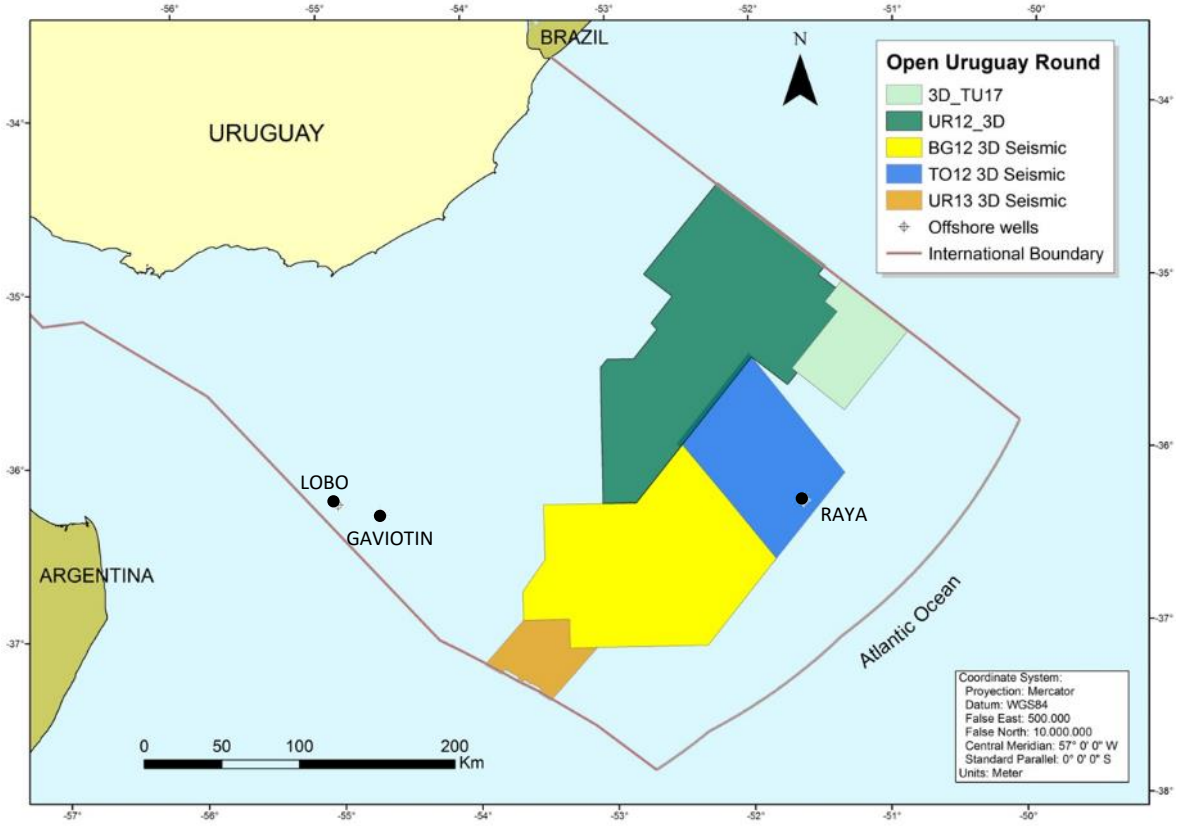
Content

- Offshore basins geology
- Database
- Prospectivity
- Analogies with Namibia
- Uruguay Round
- Final remarks

Database

- 41,000 km of 2D seismic
- 41,000 km^2 of 3D seismic
- 3 exploratory wells
- Other studies include CSEM, gravity and magnetic data, geochemical analyses of seabed samples.



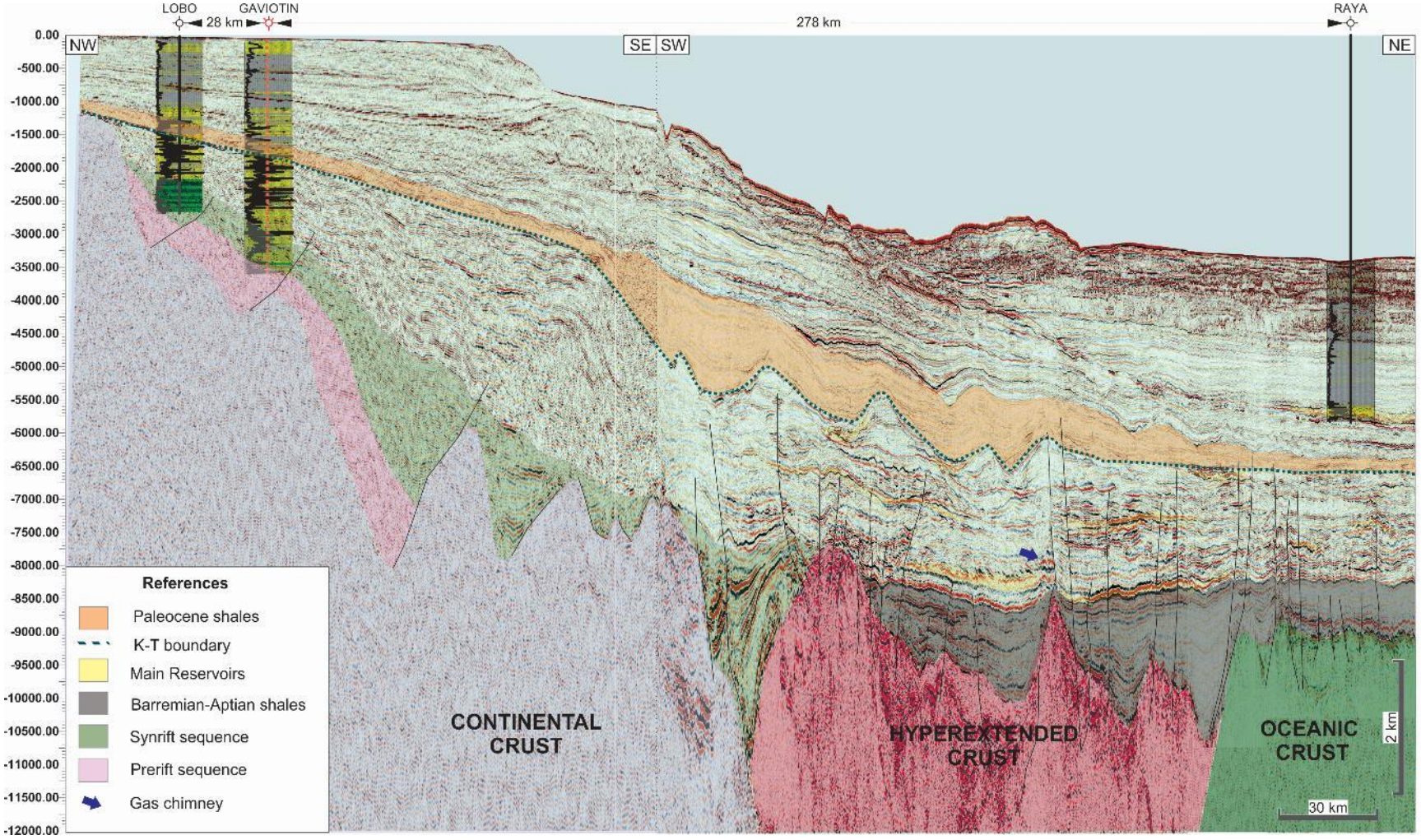


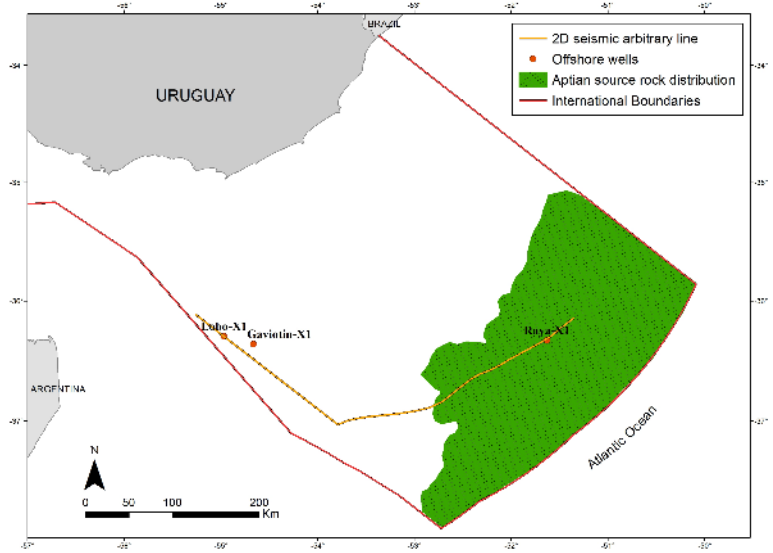
Content

- Offshore basins geology
- Database
- Prospectivity
- Analogies with Namibia
- Uruguay Round
- Final remarks

Prospectivity

Deep-water Cretaceous postrift sequences remain untested





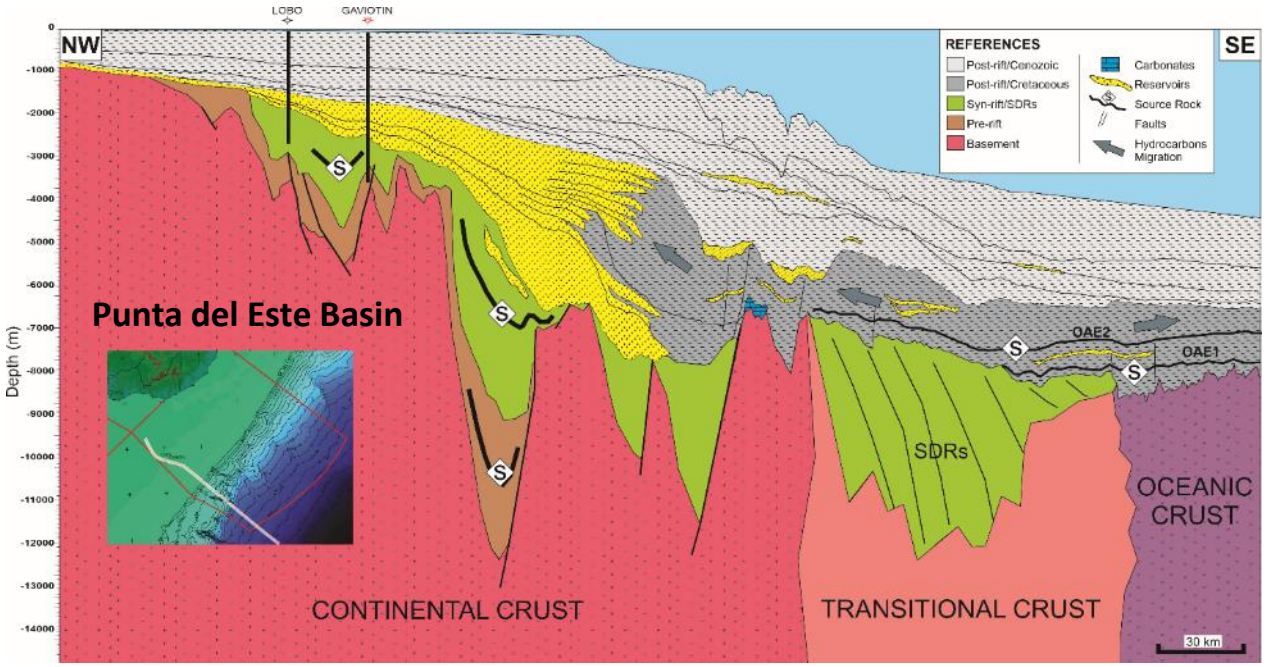
Prospectivity – Play types

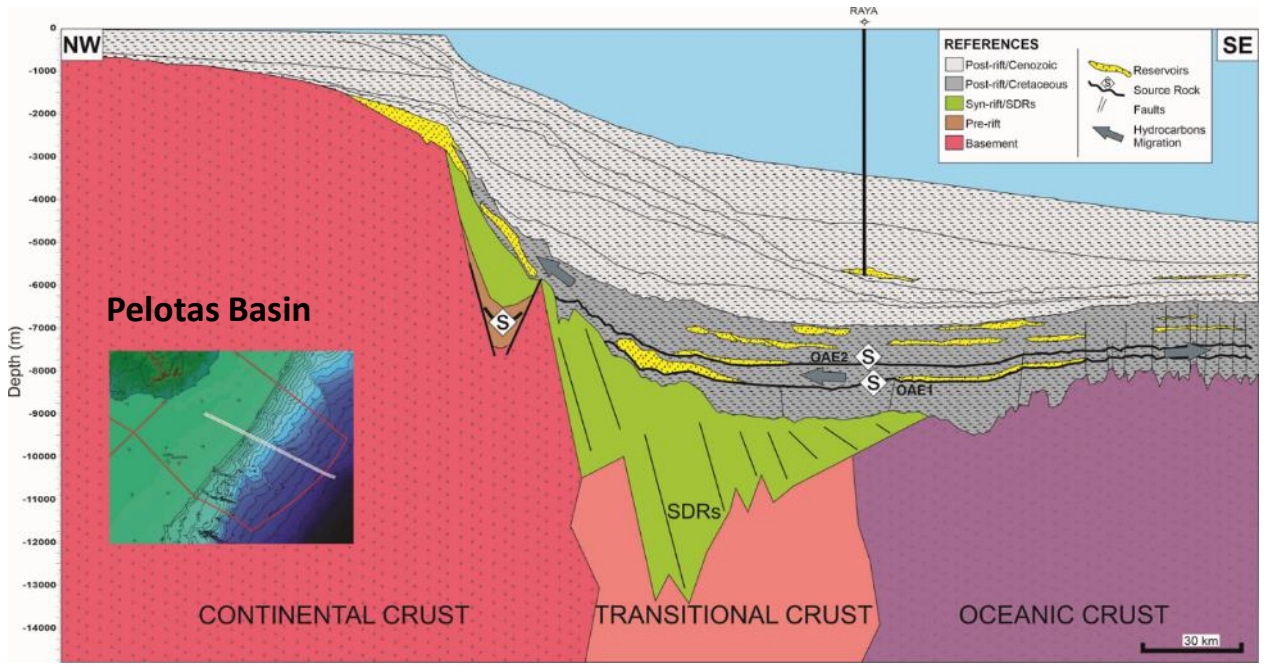
Play	Description
1	Prerift anticlines
2	Synrift lacustrine fans
3	Isolated carbonate buildups (Transition)
4	Early postrift drapes (Albian)
5	Early postrift turbidites (Albian)
6	Early postrift channel systems iAlbian)
7	Early postrift prograding deltas
8	Upper Cretaceous turbidites (Conician to Maastritchian)
9	Upper Cretaceous channel systems (Conician to Maastritchian)
10	Upper Cretaceous pinchouts
11	Paleocene to Oligocene channel systems
12	Eocene to Oligocene turbidites

Stratigraphic, mixed, and structural traps, from shallow to ultra-deep waters.

Classified into 12 different plays concepts

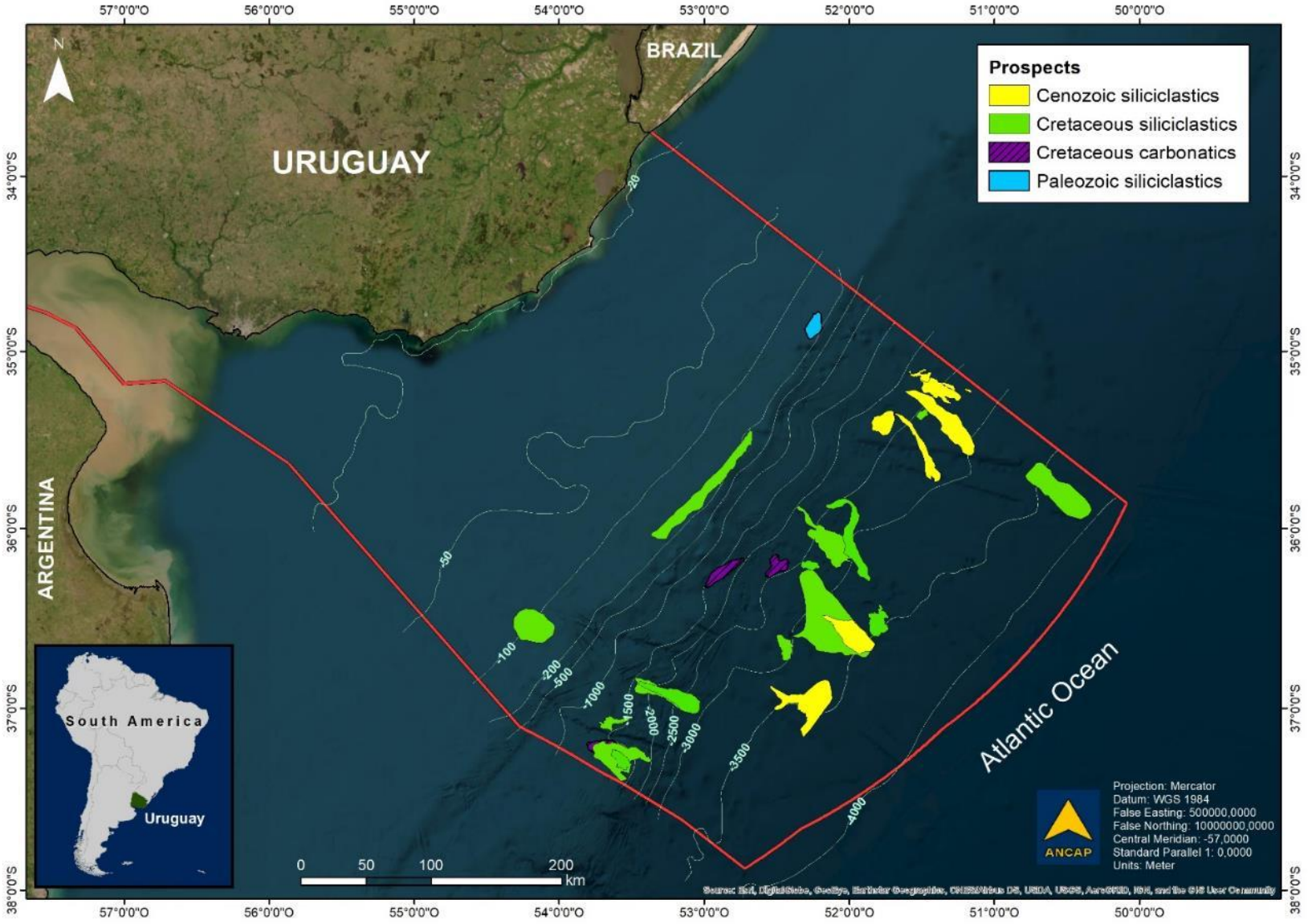
A – Prerift plays (Anticlines and faulted blocks in preserved Paleozoic sequence)
B – Synrift plays (Lacustrine fans)
C – Transition plays: Isolated carbonate buildups
D – **Cretaceous postrift plays: Turbidites, deltas, drapes, channel systems, pinchouts**
E – Cenozoic postrift plays: Turbidites and channels





ANCAP

Prospects map



ANCAP

Content

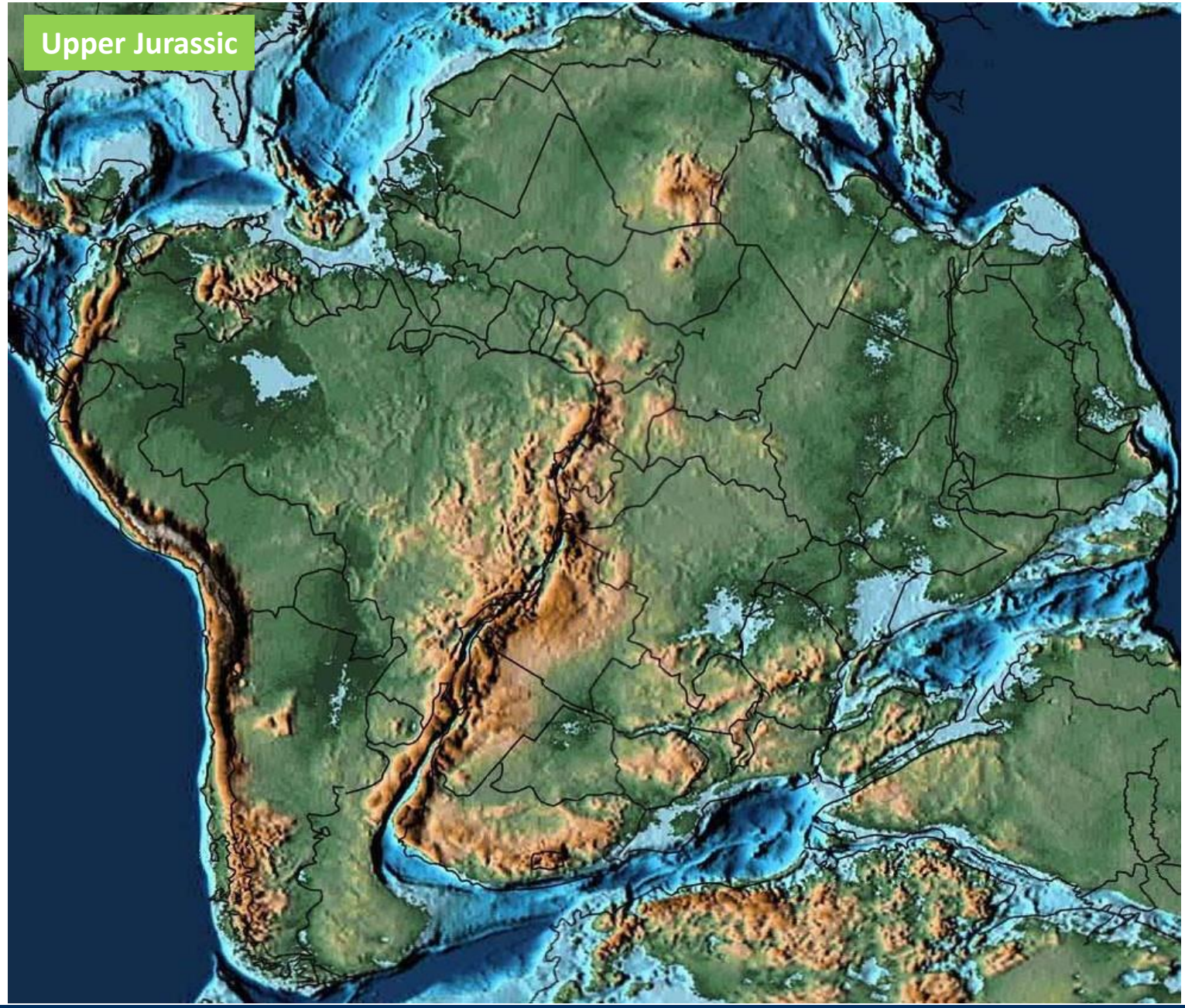
- Offshore basins geology
- Database
- Prospectivity
- Analogies with Namibia
- Uruguay Round
- Final remarks

Analogies with Namibia

- Paleogeographic restoration for the Upper Jurassic (150 Ma).

- Breakup of Gondwana supercontient previous to the opening of the Atlantic Ocean.

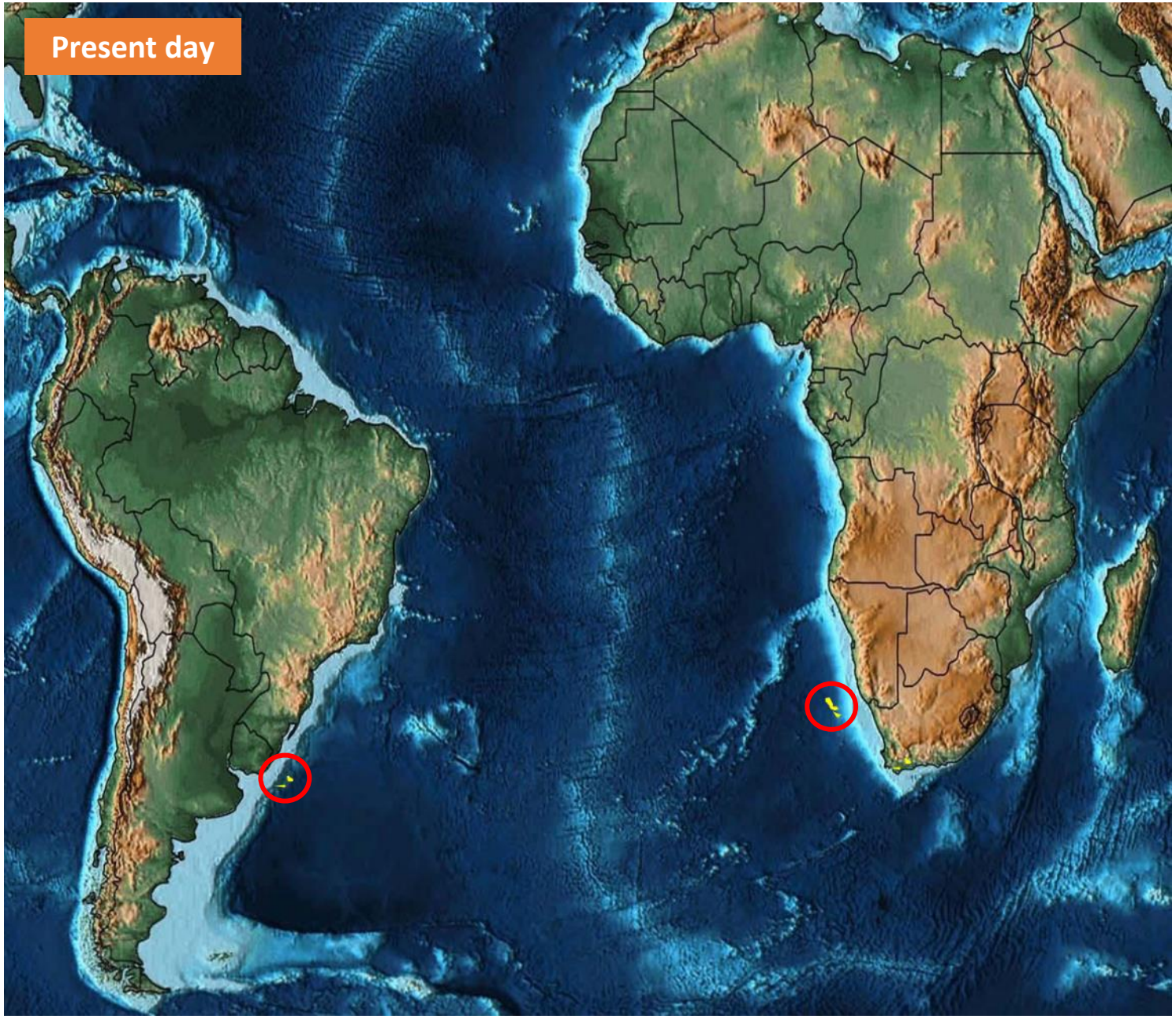
- Uruguay and Namibia were “attached”.



Scotese, (2014)

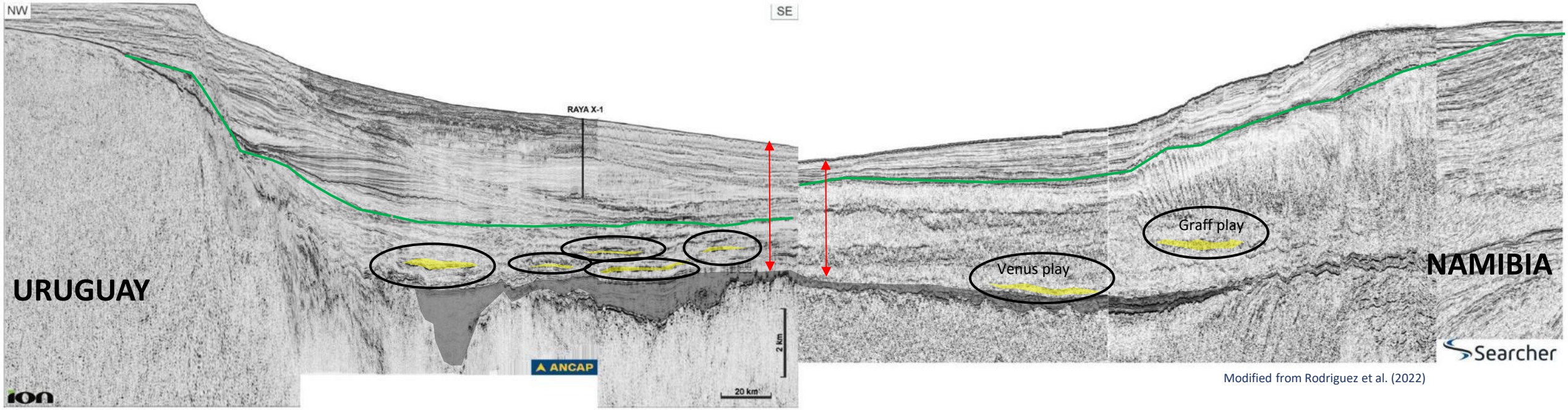
Analogies with Namibia

- Present-day location of Venus and Graff and analogous prospects offshore Uruguay.



Scotese, (2014)

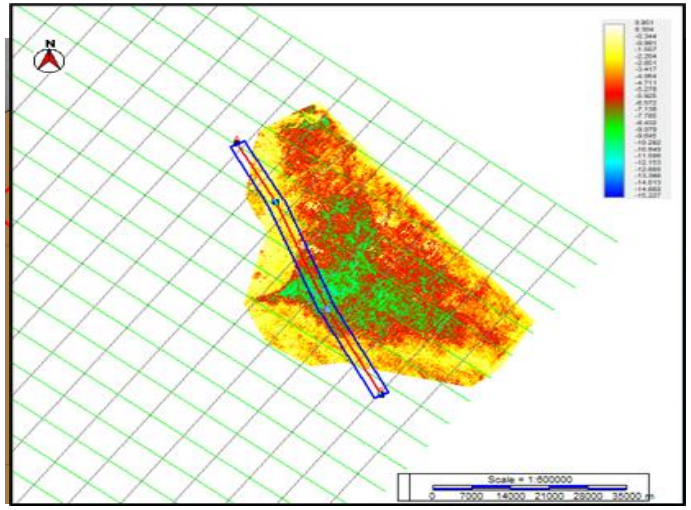
Analogies with Namibia (and differences)



Modified from Rodriguez et al. (2022)

- Thicker Barremian-Aptian sequence offshore Uruguay.
- More overburden for the Aptian source rock offshore Uruguay.
- Several cretaceous reservoirs identified analogous to Venus and Graff
- Regional and thick Paleocene seal

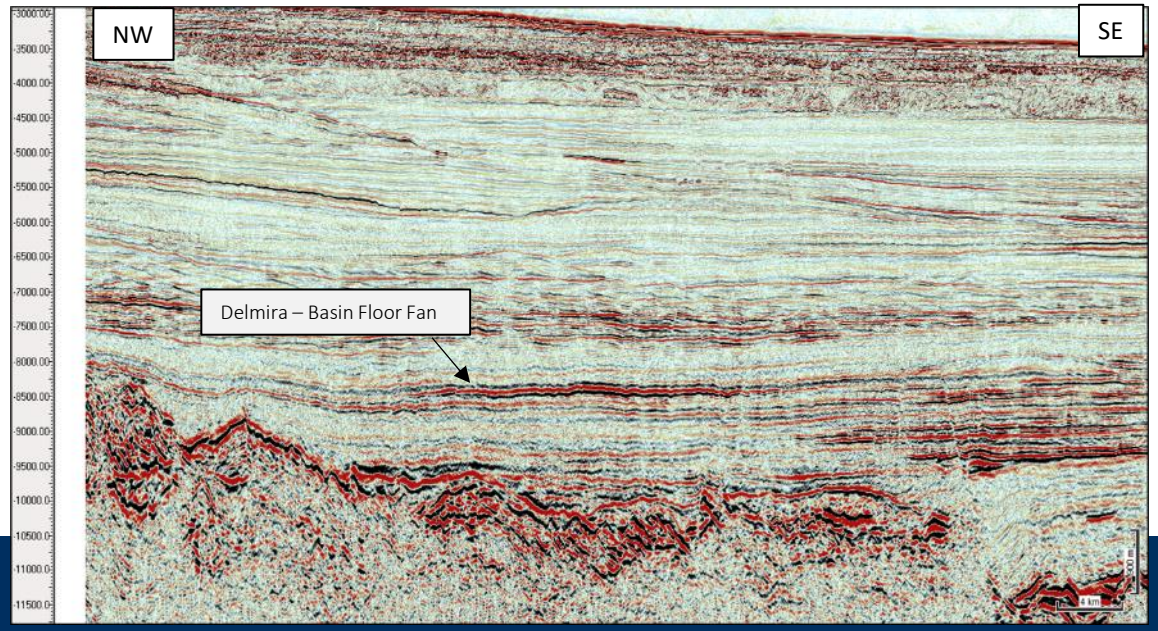
Analogies of plays (Albian submarine fans)



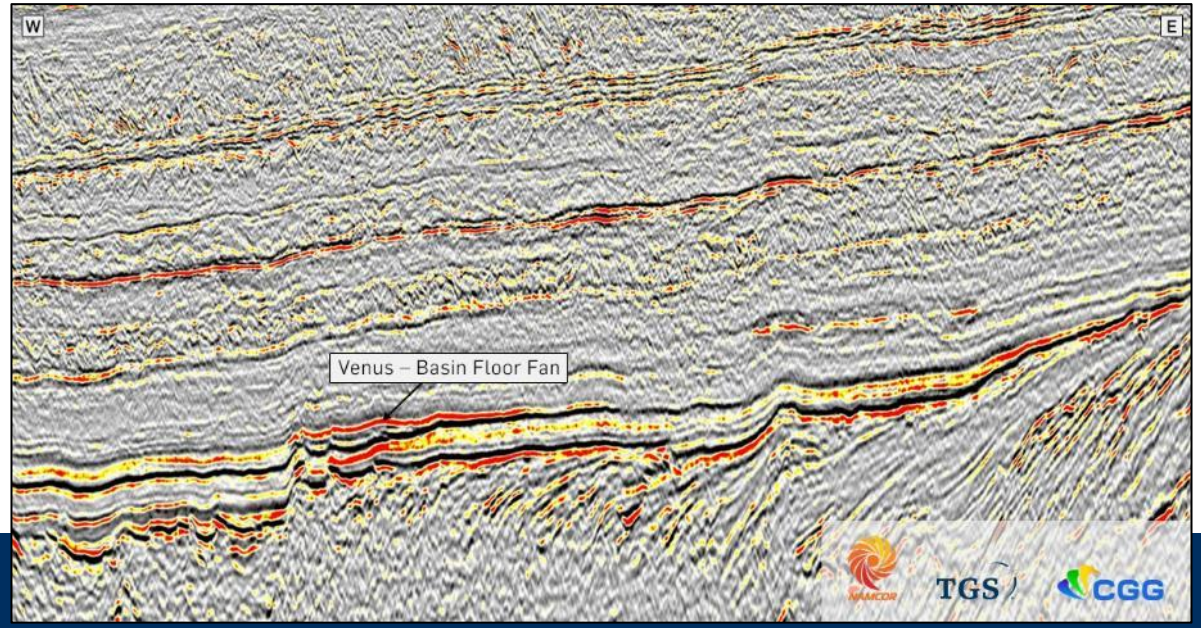
Delmira (Uruguay)
PoS: 18,7%
Reservoir age: Aptian-Albian
Thickness: 44 m (net pay)
Area: 473 km^2
Bathymetry: 4800 m
Distance to shore: 242 km
Estimated vol. 1.47 B bbl (P50)

Venus (Namibia)
Reservoir age: Aptian-Albian
Thickness: 84 m (net pay)
Area: 600 km^2
Bathymetry: 3000 m
Distance to shore: 290 km
Estimated Vol. 5 B bbl

Delmira prospect (Uruguay)

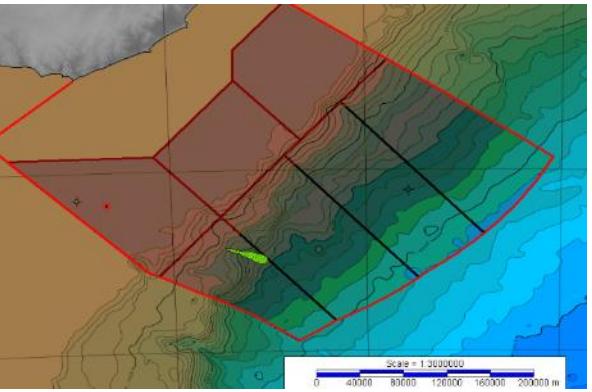


Venus prospect

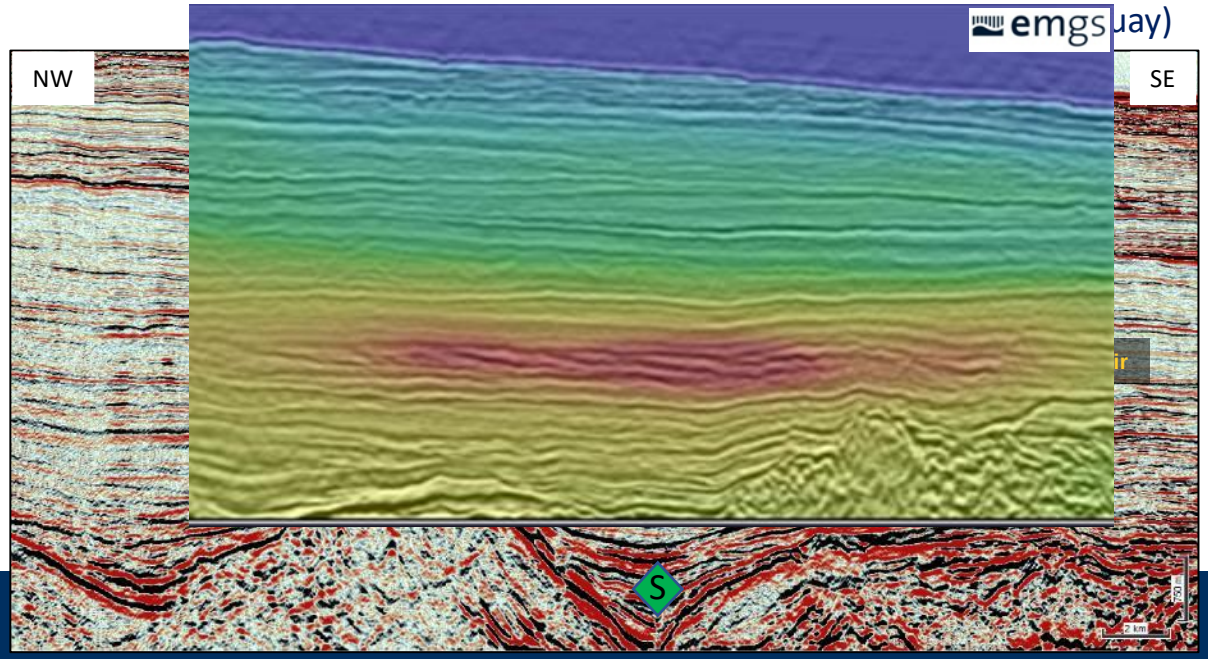


https://twitter.com/CGGcompany/status/1498916051916144641/photo/1

Analogies of plays (Upper cretaceous turbidites)

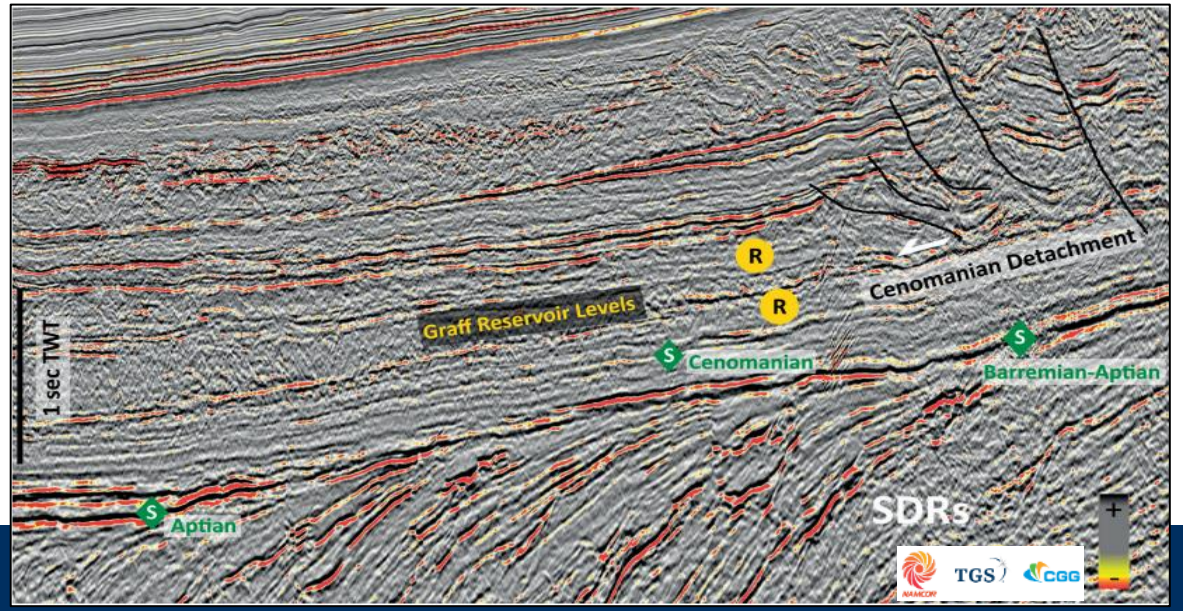


Matilde (Uruguay)
PoS: 23,4%
Reservoir age: Upper Cretaceous
Thickness: 100 m (net pay)
Area: 163 km^2
Bathymetry: 2200 m
Distance to shore: 250 km
Estimated vol 490 MM bbl (P50)



Graff (Namibia)
Reservoir age: Conician-Santonian
Thickness: 60 m (net pay)
Area: 150 km^2
Bathymetry: 2000 m
Distance to shore: 270 km
Estimated vol.: 250-300 MM bbl

Graff prospect (Namibia)



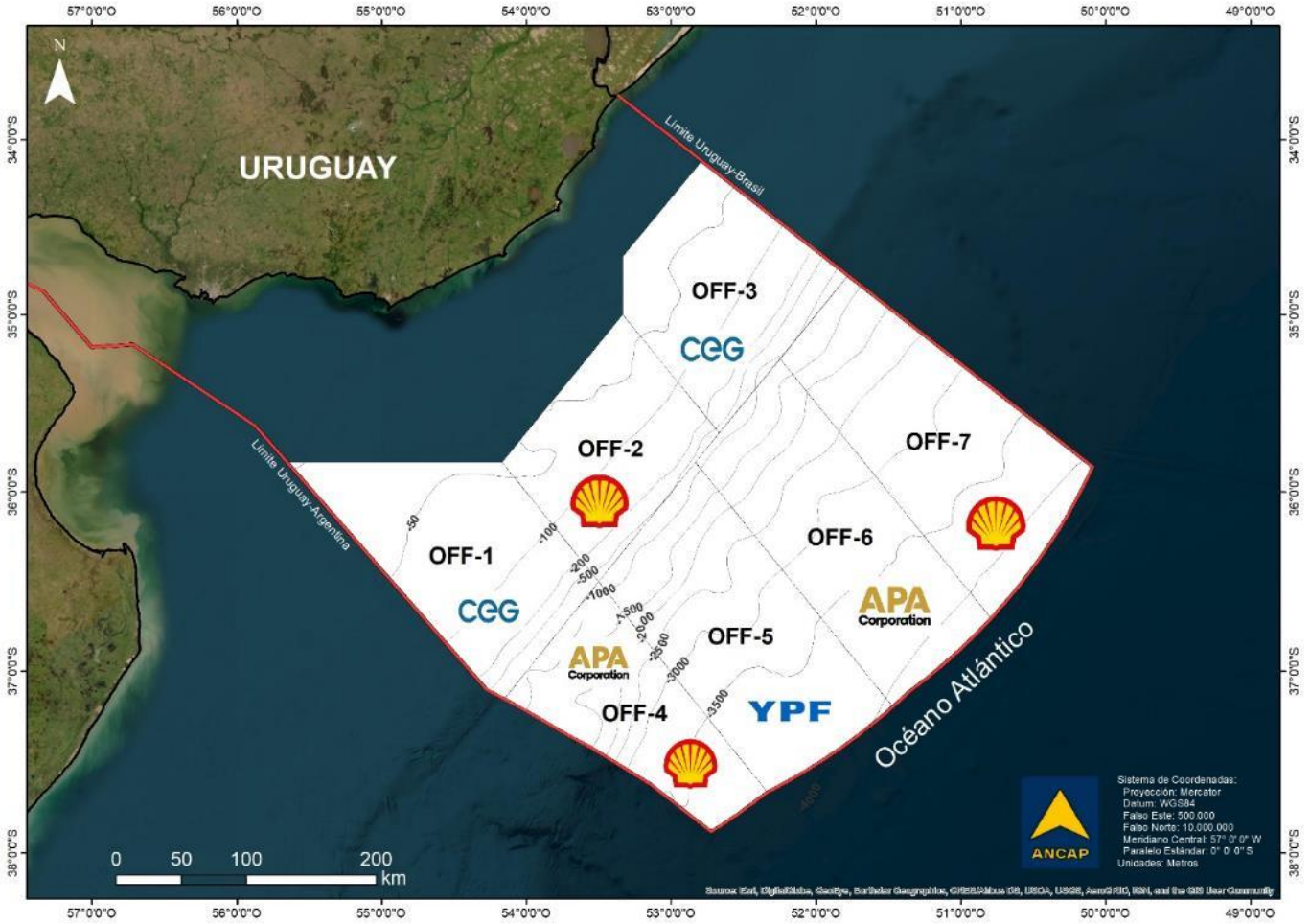
Winter et al., (2022)

Content

- Offshore basins geology
- Database
- Prospectivity
- Analogies with Namibia
- Uruguay Round
- Final remarks

Uruguay Round

- 7 Blocks (approx. size 15.000 km^2)
- All awarded
- Exploratory activities over the next 4 years:
  - G&G interpretation over existing data
  - 3D seismic acquisition
  - 1 exploratory well in Area OFF-6
- Farm-in opportunities



Content

- Offshore basins geology
- Database
- Prospectivity
- Analogies with Namibia
- Uruguay Round
- Final remarks

Final remarks

- Renewed interest for exploration offshore Uruguay
- Associated with strong analogies with Orange Basin
- Existing 3D seismic data cover a third of the offshore but only 3 wells drilled
- Untested deepwater Cretaceous sequence with identified prospects
- New 3D seismic data to be acquired and a deep-water well to be drilled in the next 3 years
- Several farm-in opportunities

“World needs more investments in oil production no matter the speed of energy transition” – Rystad Energy

And finally, an invitation...

Energy Summit 2024: Security, Strategy and Transition

Tuesday, 19 November – Thursday, 21 November 2024, 8:00 a.m.–5:00 p.m. | Uruguay

AAPG Latin America & Caribbean Energy Summit

- **19-21 November, 2024**
- **Punta del Este, Uruguay**

Thank you for your attention

bconti@ancap.com.uy

ANCAP